

RSW 1300 3-Phase Railway Sinewave Inverter

RoHS Compliant
Directive 2002/95/EC



Pure sinewave



3-Phase output



High frequency technology



Light weight, compact size



Full electronic protection



Extended temperature range



Designed for rolling applications according to EN50155



Output fail alarm (Form B)



Remote control

Applications

- Railway Applications
- Industrial Controls
- Telecom Power Plants
- Marine & other rugged environments
- Electric Utilities and Substations
- Base Station Power

Sinewave Inverter

Series RSW1300-3P

Description

The RSW1300-3P consists of three phase sine-wave DC-AC inverters with galvanic isolation between input and output.

The unit allows:

- Shutdown applying voltage output 15 to 143V on pins 1 and 2 of J2
- Start-up motors by means of a soft start. In the start-up, the output voltage and frequency rise linearly from 0V to set voltage and from 5Hz to set frequency. The start-up ramp slope may be changed via RS-232 port
- Set the rotation speed of a motor according to the appropriate Voltage/Frequency ratio.
- Monitoring the status of the input and output.
- Set and monitor parameters via RS-232.

The RSW1300-3P has a maximum output current protection. This protects the semiconductors even when an output short-circuit occurs. It also features a disable function for input under-voltage.

Features

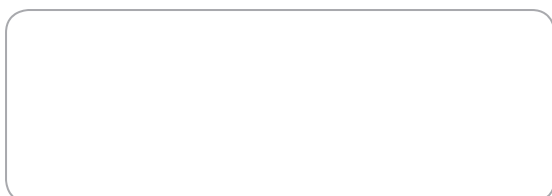
- Sine wave output voltage
- Suitable for motors control
- Adjustable output voltage
- Selectable output frequency: 50/60Hz
- High input-output isolation 3000Vrms
- Remote inhibit
- Remote control via RS232
- Alarm by isolated relay contacts
- Remote ON/OFF opto-coupled
- According to the standard EN50155
- Fire and smoke EN45545-2 approved
- Protection against overloads and short-circuits
- Protection against input undervoltage

Specifications (Specifications Subject to Change Without Notice)

Model	Input nominal	Max. input current		Output voltage		Power	Output current	Output peak current		Efficiency	Size
		No load	Full load	Nom	range			Arms 10s	10ms (lopk)		
RSW1300 3-P 24-250	24Vdc	1.05A	66.0A	250Vac	150...250V	1300VA	3.0A	4.5A	6.4A	89 %	2
RSW1300 3-P 72-250	72Vdc	0.33A	24.4A	250Vac	150...250V	1300VA	3.0A	4.5A	6.4A	90 %	1
RSW1300 3-P 110-250	110Vdc	0.20A	16.0A	250Vac	150...250V	1300VA	3.0A	4.5A	6.4A	90 %	1
RSW1300 3-P 24-400	24Vdc	1.28A	66.0A	400Vac	200...400V	1300VA	1.88A	2.8A	4.0A	89 %	2
RSW1300 3-P 72-400	72Vdc	0.39A	24.4A	400Vac	200...400V	1300VA	1.88A	2.8A	4.0A	90 %	1
RSW1300 3-P 110-400	110Vdc	0.25A	16.0A	400Vac	200...400V	1300VA	1.88A	2.8A	4.0A	91 %	1

INPUT	
Input voltage range	-30, +25% Vin nom
Maximum input ripple	15% pp Vin nom (Vrms, 100Hz)
OUTPUT	
Nominal output voltage	See table
Output voltage range	See table (adjust via RS-232)
Output frequency	50Hz, 5...60Hz via RS-232
Load regulation	< 4%
Line regulation	< 2% Vin -25% ... +25%, < 10% Vin -30% ... +30%
Output wave distortion THD	< 2% (average of 16 samples)
Output HF ripple	< 2.5%
ENVIRONMENTAL	
Storage temperature	-25 ... 80°C
Operating temperature:	
Full load	-25 ... 55°C (EN50155 T1)
50% load	-25 ... 70°C (EN50155 T3)
Relative humidity without condensation	5 ... 95%
Cooling	Controlled internal fan
MTBF (MIL-HDBK-217-E; G _b , 25°C)	100.000 h
EMC	
Immunity according	EN61000-6-2 (EN50121-3-2)
Emissions according	EN61000-6-4 (EN50121-3-2)
SAFETY	
Dielectric strength: Input / output	3000 Vrms / 50Hz / 1min
Dielectric strength: Output / ground	1500 Vrms / 50Hz / 1min
Dielectric strength: Input / ground	500 Vrms / 50Hz / 1min
Safety according to	EN60950-1
Fire and Smoke	EN455545-2
MECHANICAL	
Weight	4 kg
Dimensions	Sitze 1: 315x 180x 66.5 mm Sitze 2: 315x 200x 66.5 mm
Connections	Input wire 6mm ² to 10mm ² , Output wire 1mm ² to 2.5mm ²
PROTECTIONS	
Protection against overloads	Current limited
Against overtemperature	Shutdown with auto-recovery
CONTROL	
Output alarm	Open when alarm. Maximum rating: 0.16A at 160Vdc
Remote OFF input	Off applying 15...143 Vdc, Impedance >35kOhm

Available from:



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